

# RECLAMATION

*Managing Water in the West*

## **Draft Environmental Assessment**

# **Temporary Transfer of Water from the Bella Vista Water District to Glide and Colusa County Water Districts in 2013 Mid-Pacific Region**

**EA-13-10-NCAO**



**U.S. Department of the Interior  
Bureau of Reclamation  
Mid-Pacific Region**

**August 2013**

## **Mission Statements**

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitment to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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# Section 1 Introduction

## 1.1 Background

The Bureau of Reclamation proposes to approve a 1-year transfer of up to 3,000 acre-feet (AF) of Central Valley Project (Project) water from the Bella Vista Water District (BVWD) to the Glide Water District (GWD) and up to 5,000 AF of Project water from BVWD to Colusa County Water District (CCWD) for a total of 8,000 AF. The source of the transfer water is a contractual entitlement under a Central Valley Project (Project) water service contract between Reclamation and BVWD. The GWD and CCWD are Project water service contractors in the same area of origin as BVWD, and therefore the transfers will be conducted in accordance with Section 3405(a)(1)(M) of the Central Valley Project Improvement Act. The water to be transferred will be provided by the BVWD and conveyed to GWD, located in Glenn County, and CCWD, located in Colusa and Yolo counties, via the Tehama-Colusa Canal (TCC).

The request from BVWD for transfer of Project water stems from the reduced rainfall during the winter and spring that resulted in reduced Project water allocations for agricultural use. Reclamation's April 2013 press release announced that north of the delta allocations are 100 percent for municipal and industrial (M&I) customers and 75 percent for agriculture. This quantity of water is insufficient to meet current year irrigation requirements.

## 1.2 Need for the Proposal

The purpose of the project is to transfer Project water to alleviate an unexpected shortfall in water supply to the GWD and CCWD in 2013. This water is needed to support irrigation needs and/or M&I uses.

## 1.3 Scope

This EA has been prepared to examine the potential impacts of approving the temporary transfer of up to 8,000 AF of Project water from BVWD to GWD and CCWD from June through October 2013. For purposes of this EA, the action area includes Colusa, Glenn, Shasta, Tehama, Trinity, and Yolo Counties. A map depicting pertinent locations of the Project, including the Trinity River Division of the Project, the BVWD and GWD and CCWD service areas, and the Sacramento River and TCC are shown in Figure 1.1.

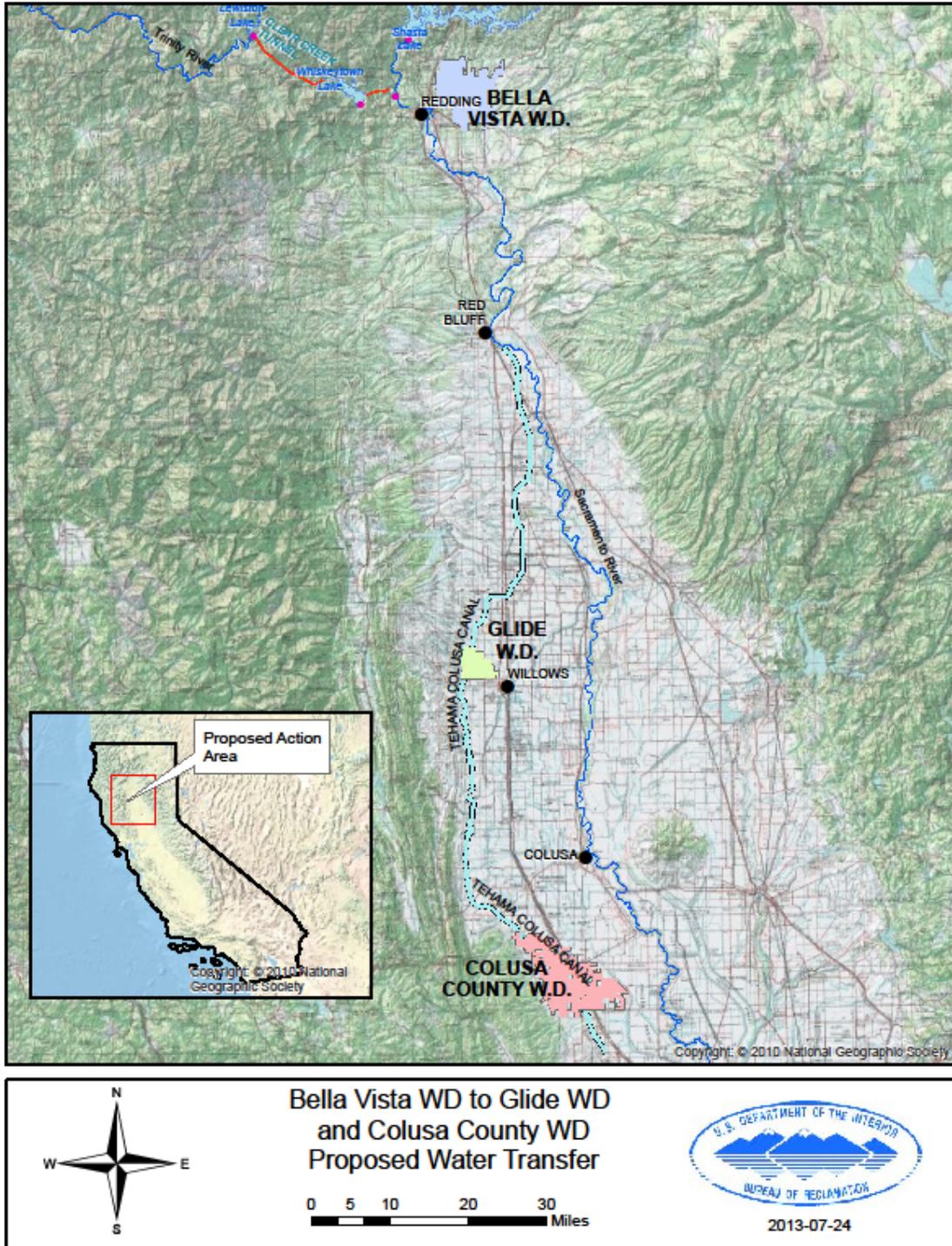


Figure 1-1. Proposed Action area and associated Central Valley Project features.

## **Section 2 Alternatives Including Proposed Action**

### **2.1 No Action Alternative**

The No Action Alternative would consist of Reclamation not approving the transfer of Project water from BVWD to GWD and CCWD. GWD and CCWD would be required to operate within the confines of the available water supply under its water service contract, use groundwater, or acquire water from other willing sellers.

### **2.2 Proposed Action Alternative**

The Proposed Action is approval of transfer of up to 8,000 AF of Project water from the BVWD to GWD and CCWD from August through October of 2013. This transfer water is a contractual entitlement under the water service contract between Reclamation and BVWD (Contract# 14-06-200-851-A-LTR1). Accounting for allocation reductions for agricultural use in 2013, the quantity of water available to the BVWD for agriculture is 13,432 AF, of which 8,000 AF is considered for transfer. The GWD and CCWD are also Project contractors in the same area of origin as BVWD, and therefore the transfer would be conducted in accordance with Section 3405(a)(1)(M) of the Central Valley Project Improvement Act.

The Project water to be transferred would originate at Trinity Lake, be diverted through Carr Tunnel into Whiskeytown Reservoir, through Spring Creek and Keswick Powerplants into the Sacramento River until being diverted at the screened Red Bluff Pump Station into the TCC. Once in the TCC, the water would flow to diversions points of each receiving district.

As a condition of approval, the water subject to transfer would be for irrigation purposes for GWD and CCWD lands irrigated within the previous three years and not lead to land conversion. Additionally, this water would be conveyed through existing facilities with no new construction or modification to facilities.

## Section 3 Affected Environment and Environmental Consequences

This section identifies the potentially affected environmental resources and the environmental consequences that could result from the Proposed Action and the No Action Alternative.

### 3.1 Physical Resources

No adverse impacts associated with Project water delivery are anticipated as a result of this transfer. The water to be transferred would originate at Trinity Lake, be diverted into Whiskeytown Reservoir, and then released into the Sacramento River at Keswick Dam over the period of several months. Water diverted from the Trinity Basin is used for multiple uses including environmental requirements for cold water in Clear Creek, as outflow from Whiskeytown Dam and Keswick (via the Spring Creek Tunnel) to support water temperature requirements in the mainstem Sacramento River. In the case of the Sacramento River, the temperature compliance location was placed at Airport Road Bridge in 2013, due to the drought conditions. This location is approximately 17 miles below Keswick Dam.

The transfer water would result in a minor increase in flow of the Sacramento River until being diverted at the Red Bluff Pumping Plant (RBPP), a screened pumping plant, from which water would then flow into the TCC to be diverted by the transferees whose point(s) of diversion are on the TCC. However, the influence is expected to be so small that it would be essentially immeasurable. For example, assuming the delivery of 8,000 AF of transfer water occurred over the period of two months, the average increase of flow in this reach of river would increase by 67 cubic feet/second from Keswick Dam. Placing this volumetric increase in the context of what is typically released during this time from Keswick Dam (e.g. 10,000 + cfs), however, would constitute less than a 0.76 percent increase in flow, which is considerably smaller than typical measurement error for stream gauges. Additionally, because this minor increase in flow would come from Whiskeytown through Spring Creek Tunnel, the water would be sufficiently cold to assist in meeting the temperature compliance objective in the Sacramento River, which is above the diversion point at the RBPP.

The amount of water diverted at the TCC would be the same as that which is released from Keswick Dam to result in a zero-sum action, resulting in no change to flows of the Sacramento River below the point of diversion, which is similar to the No Action Alternative.

No new facilities would be needed to distribute the water. The Project water would be applied to existing agricultural land and would be conveyed through existing facilities, which would avoid any adverse effects on unique geological features such as wetlands,

wild or scenic rivers, refuges, floodplains, rivers placed on the nationwide river inventory, or prime or unique farmlands.

### 3.2 Biological Resources

Several federally listed species are known to inhabit the Project area, which includes portions of Colusa, Glenn, Shasta, Tehama, Trinity, and Yolo Counties (Table 3.1). However, Reclamation has determined that the Proposed Action would have no effect on these species or designated critical habitat because conditions of approval maintain existing land use practices. These conditions include: (1) That water subject to transfer would be for irrigation purposes for lands irrigated within the previous three years and not lead to land conversion; and (2) transfer water would be conveyed through existing facilities with no new construction or modification to facilities. Riverine species would not be affected by the Proposed Action because the quantity of water transferred over the period of time would be very small relative to the total flow in the Sacramento River and water diverted into the TCC would be screened so as to avoid impacts to fish species of concern.

**Table 3-1. Federally listed species Colusa, Glenn, Shasta, Tehama, Trinity, and Yolo Counties. Source: the California Natural Diversity Database and the U. S. Fish and Wildlife websites.**

Species	Status <sup>1</sup>	Effects <sup>2</sup>	Summary Basis for ESA Determination
<b>AMPHIBIANS</b>			
California red-legged frog ( <i>Rana draytonii</i> )	E	NE	Species absent from Sacramento River Valley floor and from vicinity of the Proposed Action area. No suitable habitat in the Proposed Action area. No change to wetland or riparian habitat.
California tiger salamander, central population ( <i>Ambystoma californiense</i> )	T	NE	No land use changes would occur to habitat for this species as a result of the action, no conversion of habitat, and no new facilities would be constructed.
<b>BIRDS</b>			
Least Bell's vireo ( <i>Vireo bellii pusillus</i> )	E	NE	No land use changes would occur to habitat for this species as a result of the action, no conversion of habitat, and no new facilities would be constructed.
Western yellow-billed cuckoo ( <i>Coccyzus americanus occidentalis</i> )	C	NE	No land use changes would occur to habitat for this species as a result of the action, no conversion of habitat, and no new facilities would be constructed.

Species	Status <sup>1</sup>	Effects <sup>2</sup>	Summary Basis for ESA Determination
<b>FISH</b>			
Central Valley steelhead ( <i>Oncorhynchus mykiss</i> )	T, X	NE	No effect to flow of any water way or coldwater resource within the species' range would be affected by the proposed action.
Chinook salmon - Central Valley spring-run ( <i>Oncorhynchus tshawytscha</i> )	T, X	NE	No effect to flow of any water way or coldwater resource within the species' range would be affected by the proposed action.
Chinook salmon - Sacramento River winter-run ( <i>Oncorhynchus tshawytscha</i> )	E, X	NE	No effect to flow of any water way or coldwater resource within the species' range would be affected by the proposed action.
Coho salmon –SONC ( <i>Oncorhynchus kisutch</i> )	E, X	NE	No effect to flow of any water way or coldwater resource within the species' range would be affected by the proposed action.
North Amer.green sturgeon ( <i>Acipenser medirostris</i> )	T	NE	No effect to flow of any water way or coldwater resource within the species' range would be affected by the proposed action.
<b>INVERTEBRATES</b>			
California Freshwater shrimp ( <i>Syncaris pacifica</i> )	E	NE	No effect to flow of any water way or coldwater resource within the species' range would be affected by the proposed action.
Conservancy fairy shrimp ( <i>Branchinecta conservatio</i> )	E,X	NE	Found or believed to occur Glenn County. No land use changes would occur to habitat for this species as a result of the action, no conversion of habitat, and no new facilities would be constructed.

Species	Status <sup>1</sup>	Effects <sup>2</sup>	Summary Basis for ESA Determination
Shasta Crayfish ( <i>Pacifastacus fortis</i> )	E	NE	Only found in the Pit River and Fall River Mills, northeast of action area. No land use changes would occur to habitat for this species as a result of the action, no conversion of habitat, and no new facilities would be constructed.
Valley elderberry longhorn beetle ( <i>Desmocerus californicus dimorphus</i> )	T	NE	No land use changes would occur to habitat for this species as a result of the action, no conversion of habitat, and no new facilities would be constructed.
Vernal pool fairy shrimp ( <i>Branchinecta lynchi</i> )	T, X	NE	No land use changes would occur to habitat for this species as a result of the action, no conversion of habitat, and no new facilities would be constructed.
Vernal pool tadpole shrimp ( <i>Lepidurus packardii</i> )	E	NE	Found or believed to be in Glenn County. No land use changes would occur to habitat for this species as a result of the action, no conversion of habitat, and no new facilities would be constructed.
<b>PLANTS</b>			
Hoover's spurge ( <i>Chamaesyce hooveri</i> )	T	NE	Found or believed to be in Glenn County. No land use changes would occur to habitat for this species as a result of the action, no conversion of habitat, and no new facilities would be constructed.
palmate-bracted bird's-beak ( <i>Chloropyron palmatum</i> )	E	NE	Found or believed to be in Glenn County. No land use changes would occur to habitat for this species as a result of the action, no conversion of habitat, and no new facilities would be constructed.
Colusa grass ( <i>Neostapfia colusana</i> )	T	NE	Outside of the project area. Occurs in vernal pools along the eastern side of the central Sierra Nevada foothills.

<b>Species</b>	<b>Status<sup>1</sup></b>	<b>Effects<sup>2</sup></b>	<b>Summary Basis for ESA Determination</b>
hairy Orcutt grass ( <i>Orcuttia pilosa</i> )	E	NE	Found or believed to be in Glenn County. Occurs in vernal pools along the eastern side of the central Sierra Nevada foothills.
Greene's tuctoria ( <i>Tuctoria greenei</i> )	E	NE	No land use changes would occur to habitat for this species as a result of the action, no conversion of habitat, and no new facilities would be constructed.
McDonalds's rock cress ( <i>Arabis macdonaldiana</i> )	E	NE	Outside of the project area. No land use changes would occur to habitat for this species as a result of the action, no conversion of habitat, and no new facilities would be constructed.
Slender Orcutt grass <i>Orcuttia tenuis</i>	T, X	NE	No land use changes would occur to habitat for this species as a result of the action, no conversion of habitat, and no new facilities would be constructed.
Keck's Checker-mallow ( <i>Sidalcea keckii</i> )	E	NE	No land use changes would occur to habitat for this species as a result of the action, no conversion of habitat, and no new facilities would be constructed.
Solano grass ( <i>Tuctoria mucronata</i> )	E	NE	No land use changes would occur to habitat for this species as a result of the action, no conversion of habitat, and no new facilities would be constructed.
<b>REPTILES</b>			
Giant garter snake ( <i>Thamnophis gigas</i> )	T	NE	Found or believed to occur in Glenn County. No land use changes would occur. Habitat would remain the same and no new facilities would be constructed.
<p>1 Status= Listing of federally special status species, unless otherwise indicated.  E: Listed as Endangered.  T: Listed as Threatened.  X: Critical habitat designated</p> <p>2 Effects =  NE = No Effect determination.</p>			

### 3.3 Cultural Resources

The Proposed Action will not produce any ground disturbances, it will not result in the construction of new facilities or the modification of existing facilities, and it will not result in any changes in land use. Reclamation has determined that neither the Proposed Action nor the No Action Alternative have the potential to cause effects to historic properties, assuming such historic properties were present, pursuant to 36 CFR § 800.3(a)(1).

### 3.4 Environmental Justice

The transfer would not disproportionately affect minority or low-income populations and communities.

### 3.5 Indian Trust Assets

No Indian Trust Assets are served by the water to be transferred under the proposed action and therefore no Indian Trust Assets would be affected. Moreover, the transaction would be between a willing buyer and seller and would comply with any applicable Federal, state, local or tribal law or requirements imposed for protection of the environment.

### 3.6 Cumulative Impacts

The proposed temporary transfer will not result in any adverse cumulative impacts because there won't be any impacts.

## **Section 4 Consultation and Coordination**

### 4.1 Public Review Period

Reclamation intends to sign a Finding of No Significant Impact (FONSI) for this project, and will make this EA available for a 7-day period from August 1 through close of business August 7, 2013. Any comments received will be addressed in the FONSI. Additional analysis will be prepared if substantive comments identify impacts that were not previously analyzed or considered.

### 4.2 Endangered Species Act (16 U.S.C. 1521 et seq.)

Reclamation determined that the Proposed Action would have no effect on federally proposed or listed threatened and endangered species or their proposed or designated critical habitat. Therefore, no consultation was required under Section 7 of the ESA.

## **Section 5 List of Preparers and Reviewers**

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Don Reck, Supervisory Natural Resource Specialist, NCAO

Natalie Wolder, Repayment Specialist, NCAO, Willows

Jake Berens, Water Conservation Specialist, NCAO, Willows

Indian Trust Assets, TBD, MP-400

Cultural Resource Specialist, TBD, MP-150

**Attachment 1. ITA Concurrence of no effect.**

**Attachment 2. Cultural Resources concurrence of no effect**